UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
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Certified Mail – Return Receipt Requested

April 4, 2011

Scott Alfonse, Director
Environmental Stewardship Department
City of New Bedford
133 William Street, Room 304
New Bedford, Massachusetts 02740

Re: Preliminary Comments and Request for Additional Information on the *Stage I Environmental Screening & Stage II Environmental Risk Characterization, Keith Middle School Wetland, New Bedford, MA,* dated Nov 2010.

Dear Mr. Alfonse:

The U.S. Environmental Protection Agency - New England has reviewed the *Stage I Environmental Screening & Stage II Environmental Risk Characterization, Keith Middle School Wetland, New Bedford, MA,* dated Nov 2010 (Report). We provide the following preliminary comments and request for information on the Report. As you know, a site visit for the wetlands is scheduled for April 12, 2011 and thus EPA's comments may be revised based on this visit.

GENERAL COMMENTS

1. The technical basis, and recommended media PRG values themselves, need to be checked and verified. For example, toxicological responses and chemical concentrations in bioassays should be examined to determine if or what chemical stressor(s) are associated with the responses. If the wetland soil or sediment data can support development of a PRG, consider deriving a Maximum Acceptable Toxic Concentration (MATC) which is the geometric mean of the NOAEL and LOAEL.

2. The application of percent organic carbon (%OC) to derive sediment benchmarks in the screening or organic carbon normalized sediment or wetland soil concentrations in the ERC is not supported by data presented in the Report. These data have a large affect on estimated risks and PRG development, therefore, not only should the data be presented but DQOs of the data collection should support risk management decision making.

3. The Report does not indicate if or how censored data are used in the screening or characterization. For example, what value if any was used in place of ND? If necessary review the newly released ProUCL 4.1.00 at http://www.epa.gov/osp/hstl/tsc/software.htm.

4. The Report should consider the ecological significance of the identified risk. For example, consider: 1) the magnitude of the risk and the level of biological organization affected; 2) the likelihood an effect will occur or continue to occur; 3) ecological relationship of the KMS wetland to surrounding habitats; 4) sensitivity of the site affected habitat; 5) recovery potential from an adverse effect, and chemical persistence; 6) short and long-term ecological affect of the remedy.

5. There should be a further evaluation and discussion in the Stage II ERC of site chemical fate and transport (Problem Formulation, Conceptual Site Model (CSM)). Particle-bound hydrophobic organic chemicals (e.g., pesticides/PCBs/PAHs) and water soluble inorganics (metals) are mobile to varying degrees depending on stormwater, surface water and groundwater hydrology and fluvial characteristics of the site.

SPECIFIC COMMENTS

1. Page 3-1, §3.0, Stage II ERC – Problem Formulation:

Add to this section upfront, or within chemical-class subsections and the CSM, a more complete accounting of chemical fate and transport either as particle-bound or water soluble contaminants. Chemical migration is within the scope of the Stage II ERC. The discussion at the top of page 3-4 is insufficient. Add it to Figure 3-2 within the "Potentially Impacted Media" column. Hydrophobic organic contaminants (pesticides/ PCBs/ PAHs) and more water soluble metals are mobile to varying degrees and depend on stormwater, surface water and groundwater hydrologies and fluvial characteristics on site and down-gradient.

2. Page 3-10 §3.5, Conceptual Site Model (CSM):

See comment above regarding CSM.

A more accurate definition of Assessment Endpoints is needed. They should be natural or living resources that are of value and are to be protected and are specifically addressed in the ERC.

3. Page 4-3, §4.1.2; Table 4-5; and Page 6-2, §4.1.2:

How was 10% TOC in sediment determined for use in the SEL sediment benchmarks? In what samples and data presented where?

In Table 4-5, TOC normalized sediment concentrations are based on 29.04%OC but there is no data or statistics to support its use. These data have a large affect on estimated risks and PRG development, therefore, not only should the data be presented but DQOs of the data collection should support risk management decision making.

On page 6-2, the ERC states "high total organic carbon levels present in the aquatic habitat of the KMS Wetland" however it seems to be an assumption only. Use of %OC to estimate risks or develop PRGs must be based on real data.

4. Page 4-9, §4.2.2, Benthic Invertebrate TRVs, and Table 4-31 :

Severe Effect Levels (SELs) are only justified for Aroclor 1254 and 1260 because these do not have TEC and PEC sediment benchmarks. Based on what field data was 10% OC selected to derive SEL values in the table? What data and statistics? If there is none, or the statistics are not fully supported, then assume 1% OC and apply to Aroclor 1254 and 1260 SELs only.

Should you have any questions regarding the above, please feel free to contact me at (617) 918-1527 or Cornell Rosiu at (617) 918-1345.

Sincerely,

Kimberly N. Tisa, PCB Coordinator
Remediation & Restoration II Branch/RCRA Corrective Action Section
Office of Site Remediation & Restoration

cc: C. Rosiu, EPA
D. Sullivan, TRC
M. Cote, MassDEP
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